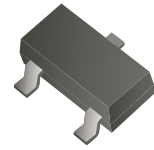


CDSV3-16-G/56-G/70-G/99-G

Reverse Voltage: 75 Volts
Forward Current: 300 mA
RoHS Device



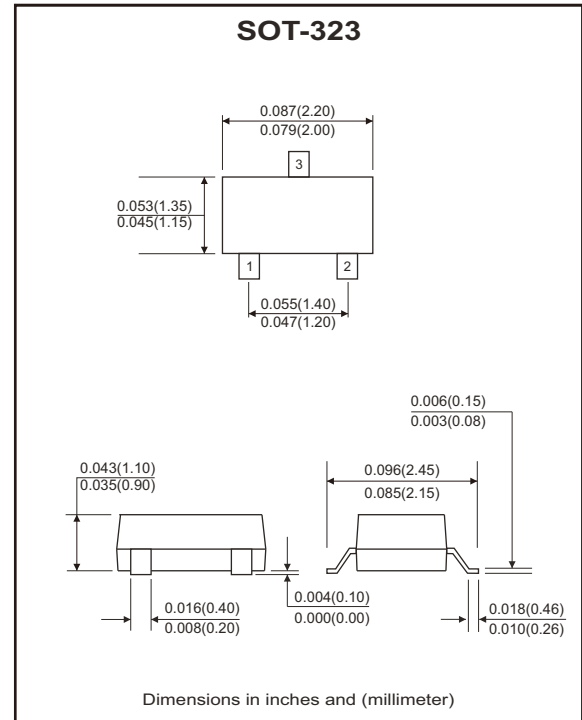
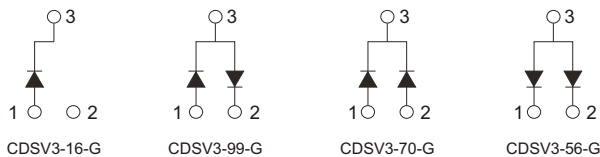
Features

- Design for mounting on small surface.
- High speed switching.
- High mounting capability, strong surge withstand, high reliability.

Mechanical data

- Case: SOT-323, molded plastic.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Weight: 0.006 grams (approx.).

Circuit Diagram



Maximum Ratings and Electrical Characteristics (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Value	Units
Repetitive peak reverse voltage	V_{RRM}		75	V
Reverse voltage	V_R		75	V
Forward current	I_F		300	mA
Peak surge forward current	I_{FSM}	$T = 1.0\mu S$	2	A
Power dissipation	P_D		200	mW
Maximum forward voltage	V_F	@ $I_F = 1mA$ @ $I_F = 10mA$ @ $I_F = 50mA$ @ $I_F = 150mA$	0.715 0.855 1.0 1.25	V
Maximum reverse current	I_R	@ $V_R = 20V$ @ $V_R = 75V$ @ $V_R = 25V, T_J = 150^\circ C$ @ $V_R = 75V, T_J = 150^\circ C$	0.025 2.5 30 50	μA
Maximum reverse recovery time	T_{rr}	$I_F = 10mA, V_R = 6V$	4	nS
Typical diode capacitance	C_J	$V_R = 0V, f = 1.0MHz$	2	pF
Maximum junction temperature	T_J		-65 to +150	$^\circ C$
Storage temperature	T_{STG}		-65 to +150	$^\circ C$

Rating and Characteristic Curves (CDSV3-16-G/56-G/70-G/99-G)

Fig.1 - Forward Characteristics

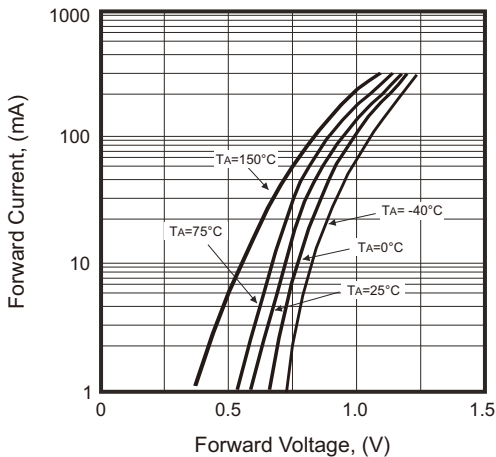


Fig.2 - Typical Reverse Characteristics

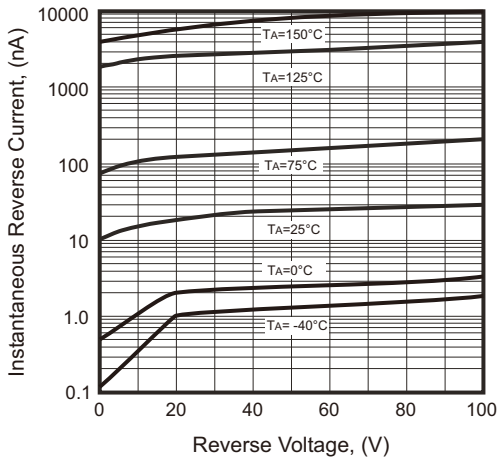


Fig.3 - Typical Capacitance vs. Reverse Voltage

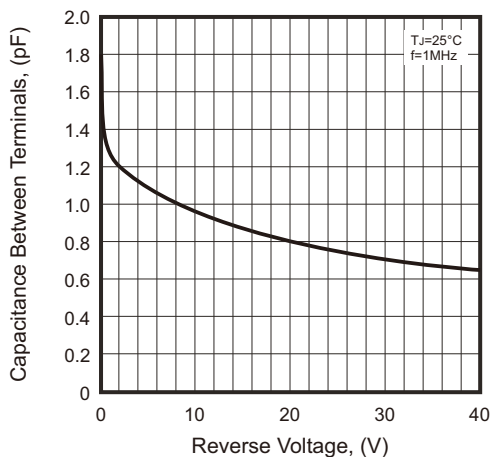


Fig.4 - Reverse Recovery Time vs. Forward Current

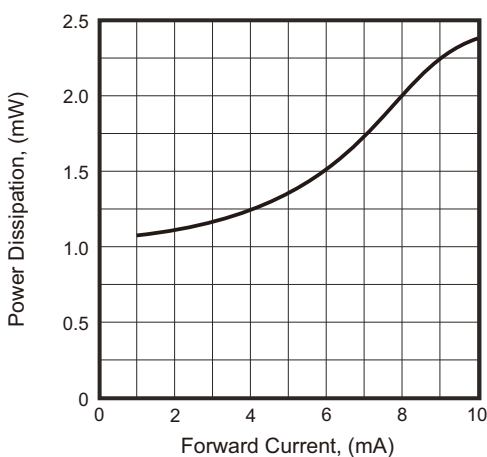
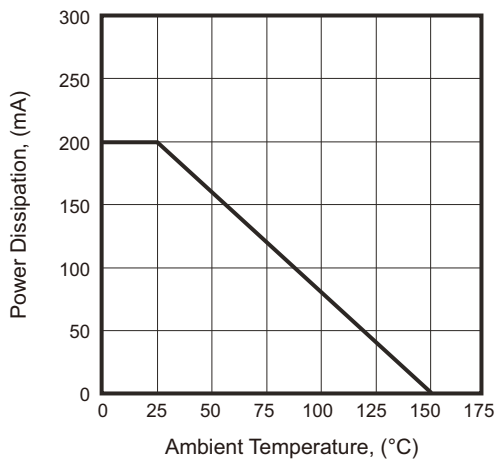
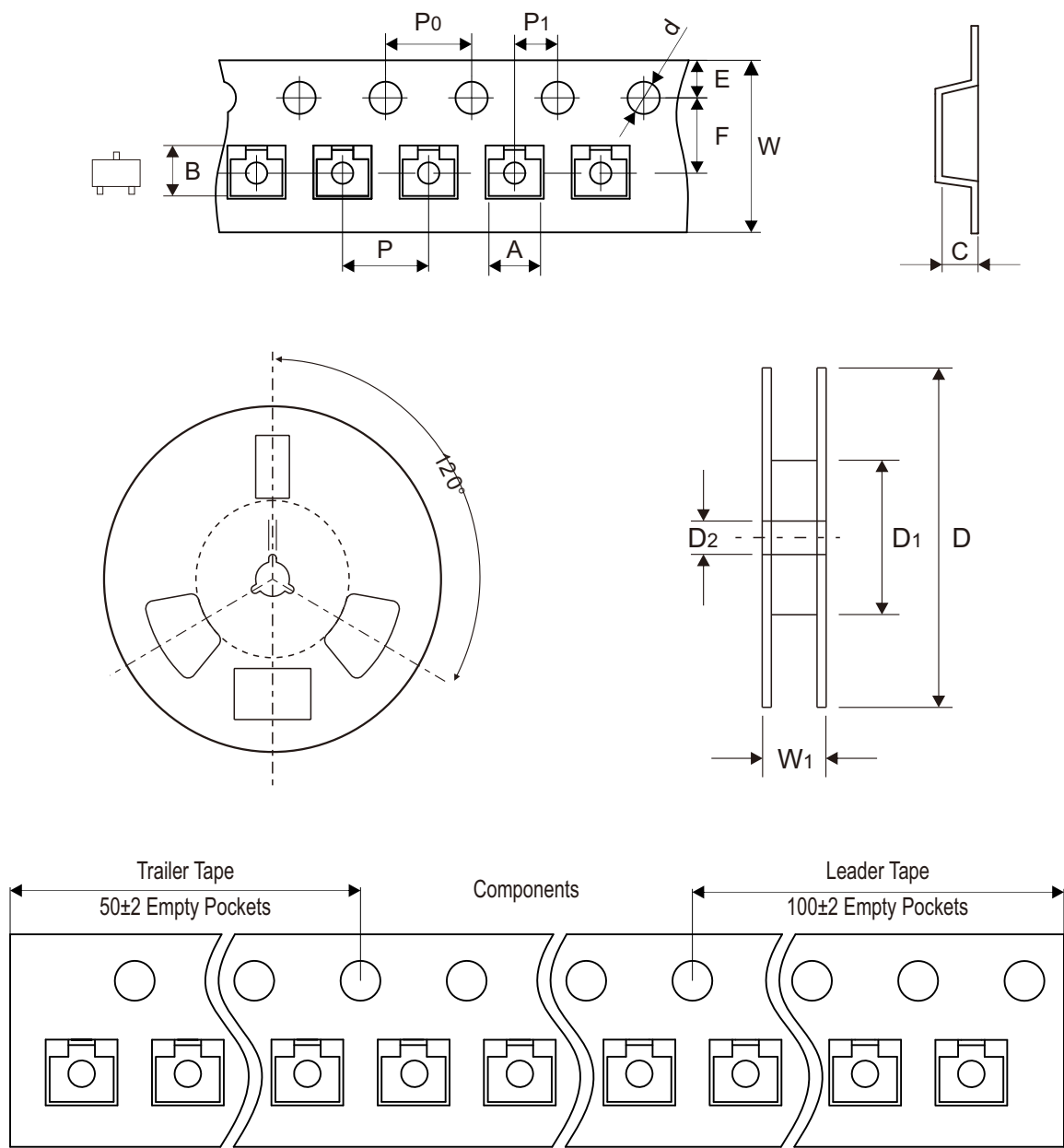


Fig.5 - Power Derating Curve, Total Package



Reel Taping Specification

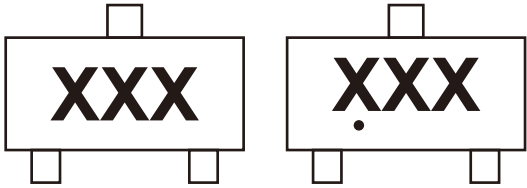


SOT-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.25 ± 0.05	2.55 ± 0.05	1.19 ± 0.05	1.55 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.089 ± 0.002	0.100 ± 0.002	0.047 ± 0.002	0.061 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOT-323	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	8.00 + 0.30 - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.315 + 0.012 - 0.004	0.484 ± 0.039

Marking Code

Part Number	Marking Code
CDSV3-16-G	A2
CDSV3-56-G	KJC
CDSV3-70-G	KJA
CDSV3-99-G	KJG



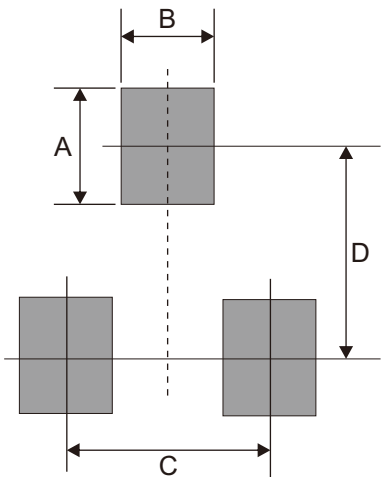
Solid dot = Control code

xx/xxx = Product type marking code

Suggested P.C.B. PAD Layout

SIZE	SOT-323	
	(mm)	(inch)
A	0.80	0.031
B	0.50	0.020
C	1.30	0.051
D	2.20	0.087

Note: 1. The pad layout is for reference purposes only.



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-323	3,000	7